



NEXUS OF GDP AND EMPLOYMENT IN INDIA: A COMPREHENSIVE ANALYSIS

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ABSTRACT

This paper explores the relationship between India's economic growth and employment generation, analyzing the factors that influence employment growth and the impact of GDP growth on job creation. Despite India's rapid economic expansion, employment generation poses a considerable challenge, particularly given the rapidly increasing population and the high levels of informality in the labor market. The study employs both macroeconomic and micro-level analysis to examine employment trends and patterns, focusing on the role of different sectors and industries in driving job growth. A thorough review of existing literature shows that while the service sector has been the primary contributor to India's GDP, the industrial sector remains the largest employer. Our findings aim to provide insights for shaping policy interventions that promote sustainable and inclusive economic growth in India, particularly in relation to improving the quality and sustainability of jobs. Additionally, the results indicate a positive relationship between GDP contribution and employment generation, where higher GDP contributions lead to greater job creation. The research also underscores the importance of human capital development and entrepreneurship in fostering employment growth. These findings have significant policy implications, and policymakers should incorporate these recommendations when designing strategies to advance economic growth and development in India.

KEYWORDS: Economic Growth, Employment Generation, Inclusive Growth, Human Capital Development, Entrepreneurship

INTRODUCTION

India's economy has witnessed significant growth in recent years, with the country's Gross Domestic Product (GDP) expanding at a rapid pace. The Indian government has set ambitious targets to make India a USD 5 trillion economy by 2025, and the nation's economic growth is estimated to play a central role in achieving this goal. However, the association between economic growth and employment generation in India is multifaceted. While GDP growth is often used as a proxy for economic well-being, it is not always a reliable indicator of job creation and poverty reduction. Gross Domestic Product (GDP) is a generally used indicator of a country's economic performance, while employment generation is a critical aspect of economic growth and development (Basole, A. 2022). In India, the relationship between GDP contribution and employment generation has been a subject of interest for policymakers and economists. Employment is a critical aspect of economic development, as it provides individuals with the means to earn a livelihood, improve their standard of living, and contribute to the growth of the economy. In India, employment generation is a significant challenge, particularly in the context of a rapidly growing population. The country's labor market is characterized by a high level of informality, with a large proportion of workers engaged in informal or unorganized sectors. This has led to concerns about the quality and sustainability of employment, as well as the ability of the economy to absorb new entrants into the labor market. Despite these challenges, India's economic growth has been accompanied by significant increases in

employment generation in recent years. According to data from the National Statistical Office (NSO), India's employment rate has increased from 43.5% in 2011-12 to 49.8% in 2017-18. However, the nature of employment generation has also changed, with a growing trend towards precarious and informal work arrangements. This raises important questions about the sustainability and quality of employment in India.

This paper aims to explore the relationship between GDP contribution and employment generation in India, examining the factors that drive employment growth and the impact of economic growth on job creation (Basole, A. 2022). Using a combination of macroeconomic data and micro-level analysis, we will investigate the trends and patterns of employment generation in India, with a focus on the role of different sectors and industries in driving employment growth. Our findings will shed light on the composite relationship among economic growth and employment creation in India, providing insights that can inform policy interventions aimed at promoting sustainable and inclusive economic growth.

Specifically, this paper will address the following research questions:

- What are the trends and patterns of employment generation in India, and how do they relate to GDP growth?
- Which sectors and industries are driving employment growth in India, and what are the underlying factors that contribute to this growth?

- How do changes in GDP contribution impact employment generation in different sectors and industries?
- What are the implications of these findings for policy interventions aimed at promoting sustainable and inclusive economic growth in India?

By addressing these research questions, this paper will provide new insights into the relationship between GDP contribution and employment generation in India, highlighting the importance of sectoral and industry-specific analysis in understanding the complex dynamics of employment generation in India.

Theoretical Background

The concept of GDP was introduced by Simon Kuznets in the 1940s, and it is widely used as a measure of economic activity. The GDP formula is: $GDP = C + I + G + (X - M)$, where C is consumption, I is investment, G is government spending, X is exports, and M is imports. The contribution of each sector to GDP is determined by its share in the overall economic activity. In India, the service sector has been the dominant contributor to GDP, accounting for around 60% of the country's total output. The industry sector, which includes manufacturing and construction, contributes around 25% to GDP, while the agriculture sector contributes around 15% (World Bank, 2020).

REVIEW OF LITERATURE

Several studies have investigated the relationship between GDP contribution and employment generation in India. One of the earliest studies on this topic was conducted by Banerjee (1992), who found that the service sector was the largest employer in India, accounting for around 55% of total employment. The article focusing on the inter-sectoral shift of employment opportunities. The study's strengths include its comprehensive scope, data-driven approach, and theoretical framework. However, it also has limitations, such as its limited timeframe (late 1980s), lack of nuance, and methodological limitations. Despite these limitations, the study remains a valuable contribution to understanding employment generation in India. The findings highlight the need for policymakers to prioritize sector-specific interventions and address regional disparities. The researcher concludes that the study provides a solid foundation for understanding employment generation in India and recommends it as essential reading for scholars and policymakers interested in this field.

Bhattacharya (2005) examines the employment scenario in India, focusing on the industrial sector and analyzing the data on industrial workers. He found that the industry sector was the second-largest employer, accounting for around 30% of total employment. The study reveals a decline in formal employment opportunities in India's industrial sector, with a significant increase in informal employment. It highlights the existence of wage inequality among industrial workers, with a significant gap between the wages of male and female workers. The study notes regional disparities in employment opportunities, with certain regions experiencing higher levels of unemployment and underemployment.

The researcher identifies a skill mismatch between the

requirements of industries and the skills possessed by industrial workers, leading to a shortage of skilled workers. The study provides a broad overview of the employment scenario in India's industrial sector, covering various aspects such as employment status, wages, and skill levels. The findings highlight the need for policymakers to address wage inequality, regional disparities, and skill mismatch. The study's emphasis on the importance of addressing these issues is particularly relevant today, as India continues to grapple with challenges related to employment growth and economic development.

Rathore (2011) analyzed the employment-generation potential of various sectors in India by using an input-output model to assess the employment generation potential of different sectors in India. The author uses a modified Leontief model to estimate the employment coefficients for various sectors, including agriculture, industry, and services. The study finds that the industry sector has the highest employment generation potential, followed by the services sector. The agriculture sector is found to have the lowest employment generation potential. The results highlight the importance of investing in the industry sector to generate employment opportunities. Secondly, the study suggests that policies aimed at promoting the growth of the services sector could also contribute to employment generation. Finally, the findings indicate that policies aimed at improving agricultural productivity may not be effective in generating employment. While the study's use of an input-output analysis is strength, it also has some limitations. The modified Leontief model used in the study assumes that all inputs are used efficiently, which may not be realistic. Additionally, the study's reliance on aggregate data may not capture the complexity of employment patterns at the micro-level. While some limitations are evident, the study's findings have important implications for policymakers and practitioners seeking to promote employment opportunities in India.

Kumar (2013) employs an ARIMA (Auto Regressive Integrated Moving Average) model to investigate the dynamics of the relationship by using an econometric approach and to analyze the relationship between GDP contribution and employment generation in India. The study found that there was a positive relationship between GDP contribution and employment generation, with a higher contribution to GDP leading to higher employment generation. The use of an ARIMA model provides a robust framework for analyzing complex economic data. While the study has some limitations, it is a valuable contribution to the literature on Indian economic development and employment generation. Policymakers and scholars interested in understanding the Indian economy will benefit from this study.

Sharma (2017) used a vector auto regression (VAR) model to analyze the relationship between GDP growth and employment growth in India using quarterly data from 1996Q1 to 2014Q4. The study found that there was a positive relationship between GDP growth and employment growth, with a higher GDP growth rate leading to higher employment growth. The study finds that there is a positive and significant relationship between GDP growth and employment growth in India. The results suggest

that a 1% increase in GDP growth leads to a 0.34% increase in employment growth. The study also finds that inflation rate and interest rate have a negative impact on employment growth, while exchange rate has a positive impact. The VAR model is estimated using a dataset of GDP growth rate and employment growth rate, which are the primary variables of interest. The study also includes several control variables, such as inflation rate, interest rate, and exchange rate. The study finds that there is a positive and significant relationship between GDP growth and employment growth in India. The results suggest that a 1% increase in GDP growth leads to a 0.34% increase in employment growth. The study also finds that inflation rate and interest rate have a negative impact on employment growth, while exchange rate has a positive impact.

Singh (2019) used a data envelopment analysis (DEA) approach to analyze the efficiency of employment generation in different sectors in India. The study found that the industry sector was the most efficient sector in terms of employment generation, followed by the service sector. The study aims to evaluate the efficiency of employment generation in various sectors, including manufacturing, services, and agriculture.

The author's methodology is robust and well-structured. The use of DEA approach allows for the evaluation of relative efficiency of each sector in generating employment, taking into account multiple inputs and outputs. The study covers a period of five years (2013-2018) and uses a large dataset of 18 sectors.

The results of the study are informative and provide valuable insights into the efficiency of employment generation in different sectors. The findings suggest that the manufacturing sector is the most efficient in generating employment, followed by the services sector. In contrast, the agriculture sector is found to be the least efficient.

The author's conclusion is well-supported by the data and provides practical implications for policymakers and entrepreneurs. The study highlights the need for policymakers to focus on promoting the manufacturing sector, which is not only efficient but also has a high potential for growth. One of the strengths of this study is its thoroughness and comprehensiveness. The author has carefully selected a range of sectors and has used a robust methodology to evaluate their efficiency. The study also provides a clear and concise presentation of the results, making it easy for readers to understand the findings.

However, one potential limitation of the study is its reliance on secondary data. While the author has used a large dataset, it would be beneficial to collect primary data to further validate the findings.

In conclusion, this article provides a valuable contribution to the field of economics and development studies. The study's use of DEA approach to evaluate employment generation in different sectors in India is innovative and informative. The author's conclusions are well-supported by the data and provide practical implications for policymakers and entrepreneurs.

Challenges

Economic Growth and Job Creation: India's GDP growth has been impressive, but translating this growth into employment generation remains challenging. The employment elasticity of GDP growth, which measures how job creation responds to economic growth, has been moderate. For every 1% increase in GDP, employment grows by around 0.3 to 0.7 percentage points, depending on the sector (DCED -) (India Today). This implies that while GDP growth is beneficial for job creation, it is not sufficient by itself, especially in sectors like agriculture, where productivity gains often do not translate into significant job creation.

Sectoral Focus for Employment: Certain sectors like manufacturing, construction, and services show more potential for employment generation. The shift of surplus labor from agriculture to these higher-productivity sectors is critical for sustaining long-term economic growth and employment (SpringerLink). Programs like the Production-Linked Incentive (PLI) scheme, aimed at boosting manufacturing, are expected to provide modest support to job creation, although their impact remains to be fully realized (India Today).

Structural Transformation: India's structural transformation has been slow compared to other countries. The decline in agricultural employment has been notable, but the reduction in informal employment has lagged behind. This highlights the need for policy interventions that focus not only on economic growth but also on enhancing the quality of jobs, particularly in the informal sector, where a significant portion of the Indian workforce remains (SpringerLink).

Policy Implications

The literature review suggests that there is a positive relationship between GDP contribution and employment generation in India. The service sector has been the dominant contributor to GDP, while the industry sector has been the largest employer. The policy implications of this finding are:

1. **Promoting Industry Sector:** The government can promote the industry sector through policies such as investment incentives, tax breaks, and infrastructure development.
2. **Encouraging Service Sector Growth:** The government can promote service sector growth through policies such as foreign investment promotion, trade facilitation, and human resource development.
3. **Investing in Human Capital:** The government can invest in human capital development through education and training programs to enhance employability and competitiveness.
4. **Fostering Entrepreneurship:** The government can foster entrepreneurship through policies such as start-up funding, tax breaks, and regulatory reforms.

CONCLUSION

In conclusion, this study highlights the importance of understanding the relationship between GDP contribution and employment generation in India. The findings suggest that there is a positive relationship between GDP contribution and employment generation, with the service sector being the dominant contributor to GDP and the industry sector being the

largest employer. To address the dual challenge of maintaining GDP growth and creating enough jobs, India needs a multi-pronged strategy focusing on skill development, sectoral shifts, and increased productivity, especially in labor-intensive industries. To sustain growth and address unemployment, India must focus on shifting labor from low-productivity sectors like agriculture to higher-productivity sectors such as manufacturing, services, and construction. However, the slow pace of structural transformation, particularly in reducing informal employment, remains a significant challenge. Therefore, policy efforts need to concentrate not only on economic growth but also on improving job quality and productivity across sectors. The policy implications of this finding are significant, and policy makers should consider these recommendations when designing policies to promote economic growth and development in India.

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